

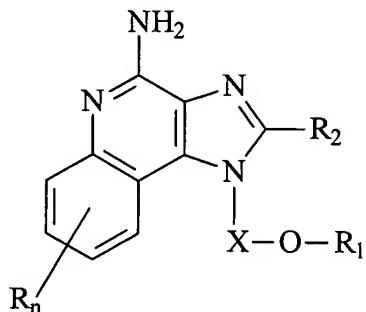
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-33 (canceled)

34 (currently amended) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound ~~or salt of~~ claim 1 to the animal of the formula (I):



(I)

wherein: X is -CHR₃-, -CHR₃-alkyl-, or -CHR₃-alkenyl-;

R₁ is selected from the group consisting of:

-alkenyl;

-aryl; and

-R₄-aryl;

R₂ is selected from the group consisting of:

-hydrogen;

-alkyl;

-alkenyl;

-aryl;

-heteroaryl;

-heterocyclyl;

-alkyl-Y-alkyl;

-alkyl-Y-alkenyl;

-alkyl-Y-aryl; and

-alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

-OH;

-halogen;

-N(R₃)₂;

-CO-N(R₃)₂;

-CO-C₁₋₁₀ alkyl;

-CO-O-C₁₋₁₀ alkyl;

-N₃;

-aryl;

-heteroaryl;

-heterocyclyl;

-CO-aryl; and

-CO-heteroaryl;

R₄ is alkyl or alkenyl, which may be interrupted by one or more

-O- groups;

each R₃ is independently H or C₁₋₁₀ alkyl;

Y is -O- or -S(O)₀₋₂;

n is 0 to 4; and

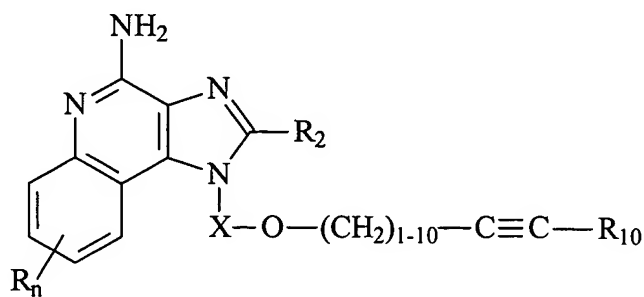
each R present is independently selected from the group consisting of C₁₋₁₀ alkyl,

C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;

or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.

35 (canceled)

36 (currently amended) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound ~~or salt of~~ claim 11 to the animal of the formula (II):



(II)

wherein X is $-\text{CHR}_3-$, $-\text{CHR}_3\text{-alkyl-}$, or $-\text{CHR}_3\text{-alkenyl-}$;

R_{10} is selected from the group consisting of:

- H;
- alkyl;
- alkenyl; and
- aryl;

R_2 is selected from the group consisting of:

- hydrogen;
- alkyl;
- alkenyl;
- aryl;
- heteroaryl;
- heterocyclyl;
- alkyl-Y-alkyl;
- alkyl-Y-alkenyl;
- alkyl-Y-aryl; and

-alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

- OH;
- halogen;
- $-\text{N}(\text{R}_3)_2$;
- $-\text{CO}-\text{N}(\text{R}_3)_2$;
- $-\text{CO}-\text{C}_{1-10}\text{ alkyl}$;

_____ -CO-O-C₁₋₁₀ alkyl;

_____ -N₃;

_____ -aryl;

_____ -heteroaryl;

_____ -heterocyclyl;

_____ -CO-aryl; and

_____ -CO-heteroaryl;

_____ n is 0 to 4;

_____ Y is -O- or -S(O)₀₋₂;

_____ each R₃ is independently H or C₁₋₁₀ alkyl; and

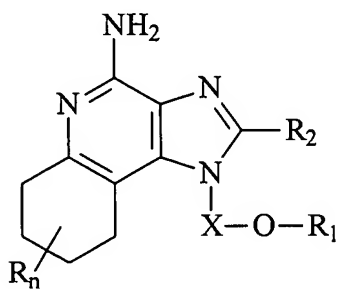
_____ each R present is independently selected from the group consisting of C₁₋₁₀ alkyl,

_____ C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;

_____ or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.

37-39 (canceled)

40 (currently amended) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound or salt of claim 21 to the animal of the formula (III):



(III)

wherein: _____ X is -CHR₃-, -CHR₃-alkyl-, or -CHR₃-alkenyl-;

_____ R₁ is selected from the group consisting of:

_____ -aryl;

_____ -alkenyl; and

-R₄-aryl;

R₂ is selected from the group consisting of:

-hydrogen;

-alkyl;

-alkenyl;

-aryl;

-heteroaryl;

-heterocyclyl;

-alkyl-Y-alkyl;

-alkyl-Y-aryl;

- alkyl-Y- alkenyl; and

- alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

-OH;

-halogen;

-N(R₃)₂;

-CO-N(R₃)₂;

-CO-C₁₋₁₀ alkyl;

-CO-O-C₁₋₁₀ alkyl;

-N₃;

-aryl;

-heteroaryl;

-heterocyclyl;

-CO-aryl; and

-CO-heteroaryl;

R₄ is alkyl or alkenyl, which may be interrupted by one or more

-O- groups;

each R₃ is independently H or C₁₋₁₀ alkyl;

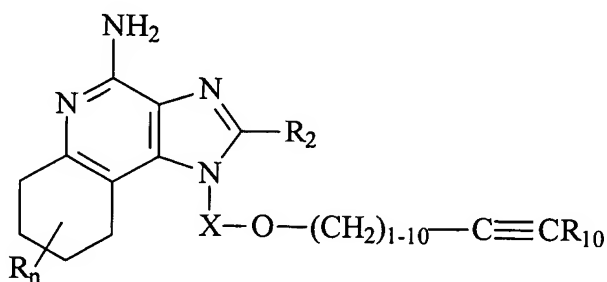
Y is -O- or -S(O)₀₋₂;

n is 0 to 4; and

each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;
or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.

41-45 (canceled)

46 (new) A pharmaceutical composition comprising a therapeutically effective amount of a compound of the formula (IV):



(IV)

wherein: X is -CHR₃-, -CHR₃-alkyl-, or -CHR₃-alkenyl-;

R₁₀ is selected from the group consisting of:

-H;
 -alkyl;
 -alkenyl; and
 -aryl;

R₂ is selected from the group consisting of:

-hydrogen;
 -alkyl;
 -alkenyl;
 -aryl;
 -heteroaryl;
 -heterocyclyl;
 -alkyl-Y-alkyl;
 -alkyl-Y-aryl;

-alkyl-Y- alkenyl; and

- alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

-OH;

-halogen;

-N(R₃)₂;

-CO-N(R₃)₂;

-CO-C₁₋₁₀ alkyl;

-CO-O-C₁₋₁₀ alkyl;

-N₃;

-aryl;

-heteroaryl;

-heterocyclyl;

-CO-aryl; and

-CO-heteroaryl;

each R₃ is independently H or C₁₋₁₀ alkyl;

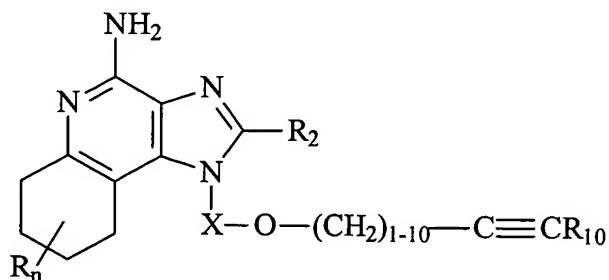
Y is -O- or - S(O)₀₋₂;

n is 0 to 4; and

each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;

or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

47 (new) A method of inducing cytokine biosynthesis in an animal comprising administering a compound of the formula (IV):



(IV)

wherein: X is $-\text{CHR}_3-$, $-\text{CHR}_3\text{-alkyl-}$, or $-\text{CHR}_3\text{-alkenyl-}$;

R_{10} is selected from the group consisting of:

- H;
- alkyl;
- alkenyl; and
- aryl;

R_2 is selected from the group consisting of:

- hydrogen;
- alkyl;
- alkenyl;
- aryl;
- heteroaryl;
- heterocyclyl;
- alkyl-Y-alkyl;
- alkyl-Y-aryl;
- alkyl-Y-alkenyl; and

-alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

- OH;
- halogen;
- $-\text{N}(\text{R}_3)_2$;
- $-\text{CO}-\text{N}(\text{R}_3)_2$;

-CO-C₁₋₁₀ alkyl;
 -CO-O-C₁₋₁₀ alkyl;
 -N₃;
 -aryl;
 -heteroaryl;
 -heterocyclyl;
 -CO-aryl; and
 -CO-heteroaryl;

each R₃ is independently H or C₁₋₁₀ alkyl;

Y is -O- or -S(O)₀₋₂-;

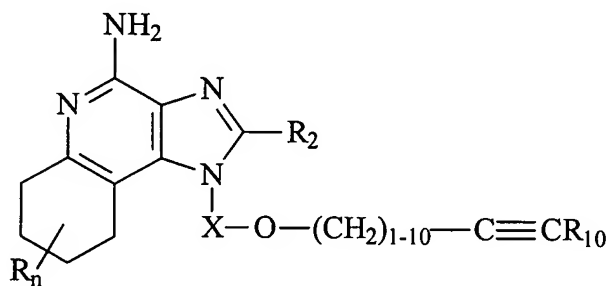
n is 0 to 4; and

each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;

or a pharmaceutically acceptable salt thereof, to the animal in an amount effective for cytokine induction.

48 (new) The method of claim 47 wherein the cytokine is IFN- α .

49 (new) A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound of the formula (IV):



(IV)

wherein: X is -CHR₃-, -CHR₃-alkyl-, or -CHR₃-alkenyl-;

R₁₀ is selected from the group consisting of:

-H;
-alkyl;
-alkenyl; and
-aryl;

R₂ is selected from the group consisting of:

-hydrogen;
-alkyl;
-alkenyl;
-aryl;
-heteroaryl;
-heterocyclyl;
-alkyl-Y-alkyl;
-alkyl-Y-aryl;
-alkyl-Y- alkenyl; and
- alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

-OH;
-halogen;
-N(R₃)₂;
-CO-N(R₃)₂;
-CO-C₁₋₁₀ alkyl;
-CO-O-C₁₋₁₀ alkyl;
-N₃;
-aryl;
-heteroaryl;
-heterocyclyl;
-CO-aryl; and
-CO-heteroaryl;

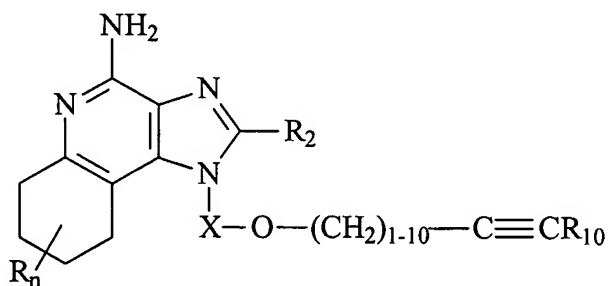
each R₃ is independently H or C₁₋₁₀ alkyl;

Y is -O- or - S(O)₀₋₂;

n is 0 to 4; and

each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;
or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.

50 (new) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound of the formula (IV):



(IV)

wherein: X is -CHR₃-, -CHR₃-alkyl-, or -CHR₃-alkenyl-;

R₁₀ is selected from the group consisting of:

- H;
- alkyl;
- alkenyl; and
- aryl;

R₂ is selected from the group consisting of:

- hydrogen;
- alkyl;
- alkenyl;
- aryl;
- heteroaryl;
- heterocyclyl;
- alkyl-Y-alkyl;
- alkyl-Y-aryl;
- alkyl-Y-alkenyl; and

- alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

- OH;
- halogen;
- N(R₃)₂;
- CO-N(R₃)₂;
- CO-C₁₋₁₀ alkyl;
- CO-O-C₁₋₁₀ alkyl;
- N₃;
- aryl;
- heteroaryl;
- heterocyclyl;
- CO-aryl; and
- CO-heteroaryl;

each R₃ is independently H or C₁₋₁₀ alkyl;

Y is -O- or -S(O)₀₋₂;

n is 0 to 4; and

each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;

or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.